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Subject	Puerto Rico Landfill Initiative	Location	Street Address: City: State: Zip Code:
Contact	Carl Plossl Adolph Everett	Phone	212-637-4088 212-637-4109
Department	DECA-RCB-SET CASD-HWPB		
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ssue

Most operating landfills in Puerto Rico have been in significant non-compliance with Federal and Commonwealth solid waste landfill regulations for over 11 years and are considered open dumps that present an ongoing risk to human health and the environment. The Solid Waste Management Authority (SWMA) and the Environmental Quality Board (EQB) have not been effective in correcting this non-compliance. In addition, Puerto Rico's Solid Waste Management Regulations have been amended and are no longer adequate to administer and enforce the approved program.

Current Status

Acting RA K. Callahan met with the honorable Anibal Acevedo Vila, Governor of the Commonwealth of Puerto Rico, Carlos Lopez, Chairman of the Puerto Rico EQB, Dr. Guillermo Riera, Executive Director, SWMA, and Javier Velez, Secretary of the Department of Natural and Environmental Resources, the week of March 7th, 2005, regarding solid waste management in Puerto Rico. The Acting RA raised the critical problem of the open dumps to the Governor.

On March 23, 2005, the Acting RA sent a letter to the Governor as a follow-up to their earlier meeting on solid waste management. The Acting RA's message was that Puerto Rico needs to take action to correct the current open dump crisis.

On March 18, 2005, the Acting RA sent an email to Carlos Lopez with EPA's comments on the Hormigueros Landfill Order, the Florida Landfill Order and compliance plan, and the Barranquitas, Arecibo, and Juana Diaz compliance plans.

On March 31, 2005, Carlos Lopez replied to the Acting RA with respect to EPA comments on the Hormigueros Landfill.

On April 20, 2005, the Acting RA sent a letter to Carlos Lopez, Dr. Riera, and Javier Velez, the heads of EQB, SWMA, and Natural and Environmental Resources, confirming agreements reached at the meeting held on March 3, 2005. This letter enclosed the March 18, 2004, letter to EQB from George Meyer and the March 18, 2005, email from the RA to Carlos Lopez. The letter called for:

- Working together and communicating on a regular basis (note that EQB has not provided the Quarterly Reports agreed upon at the March 3, 2004 meeting);
- A revised Solid Waste Management Plan within 6-9 months;
- An implementation schedule in the Plan;
- Enforcement actions addressing interim corrective measures at the existing municipal landfills; and
- Immediate closure of the Santa Isabel landfill.

On April 26, 2005, the Acting RA sent an email to Carlos Lopez which included EPA's comments on the March 31, 2005, response from Carlos Lopez.

On April 26, 2005, EPA reviewed the recently received English version of SWMA's 2003, waste characterization and measurement study, including perimeter delineation, at twenty nine landfills/dumps. The following areas are addressed in the report:

- Waste Measurement at 29 landfills (wt. and vol.);
- Waste characterization at 12 landfills and 2 transfer stations (composition and source); and
- Delineation of perimeter (footprint) of 29 landfills.

The Acting RA met with heads of EQB and SWMA in early May, 2005, and was given a presentation on the 2004 Solid Waste Management Plan. She was also provided information on the PR Government's plans for many of the open dumps, including a preliminary schedule and costs of infrastructure projects.

EPA finished an internal partial review of Puerto Rico's Solid Waste Management Program and Plans, finding that Puerto Rico's Program is no longer adequate:

- EQB modified their regulations to not require financial assurance for closure, post-closure activities and corrective actions for municipally-owned landfills. This is inconsistent with Federal regulations;
- Municipal solid waste landfills planned but never installed liners and leachate collection systems (except Humacao). EQB modified their lateral expansion definition, making it inconsistent with Federal regulations, undermining the Federal landfill regulatory program and allowing continuing operation and expansion of poorly engineered landfills.

On August 4, 2005, The Acting RA sent a letter to Carlos Lopez expressing EPA's concerns regarding the possible expansion of the Toa Baja municipal solid waste open dump. This open dump is in severe non-compliance with EPA and Commonwealth requirements.

During the week of August 22-26, 2005, EQB issued a Public Notice soliciting comments on the Consent Orders and Compliance Plans for the Hormigueros and Carolina municipal landfills. We are trying to obtain copies of these documents, especially the Hormigueros documents, in order to determine if our comments have been incorporated.

Recommendations of the RPB and RCB workgroup include:

- Informing Puerto Rico that their Program "may no longer be adequate;"
- Joint RPB/RCB review of the PR Program for other deficiencies; and
- Initiating joint RPB/RCB review of the 2004 or more current Plan.

A briefing of the Regional Administrator, Alan J. Steinberg, to address the above recommendations was held on October 17, 2005. As a result of the meeting, the RA sent a letter to the Governor on October 20, 2005 informing the Governor that EPA was concerned with the lack of progress being made and the current widespread non-compliance at almost all the landfills/open dumps, and that EPA expected the Commonwealth to make significant progress by March 1, 2006. A follow-up letter was sent to the Governor on November 2, 2005 setting forth EPA's specific expectations prior to the meeting between the Governor and the RA on November 10, 2005. These expectations are set forth below. At this meeting, the RA discussed these expectations with the Governor.

Actions Needed from the Commonwealth (Expectations):

Solid Waste Management Plan

1. As first requested in the April 20, 2005 letter from the then Acting Regional Administrator Kathleen C. Callahan to Carlos Lopez, Dr. Riera, and Javier Velez, please submit, in English, by December 30, 2005, a copy of the most current Solid Waste Management Plan for Puerto Rico. Include associated financing plans needed to implement the Solid Waste Management Plan, including specific financing mechanisms

and funding sources for both capital and operational costs, along with a schedule for obtaining such financing. EPA will review and provide comments by February 10, 2006. As of this date, the Solid Waste Management Plan has not been submitted.

Outreach on Solid Waste Management Plan

2. Governor to host a meeting, or series of meetings, among the municipalities and the significant corporate/private entities, before March 1, 2006, on the current Solid Waste Management Plan for Puerto Rico and Operation Compliance. These meetings should reflect EPA's comments on the current Solid Waste Management Plan and discuss the plans that the Central Government has for each of the open dumps/landfills, (e.g., closure of entire facility, closure of existing cells and construction of new cells that meet federal and equivalent Commonwealth requirements). How the financing will be achieved and who will be responsible for the design and construction of the new cells should also be discussed.

Regulatory Changes

- 3. By November 30, 2005, officially notify EPA, in writing (in English), of all changes that have been made to the Puerto Rico solid waste regulations since EPA approved Puerto Rico's Solid Waste Management Program, including EPA's acceptance of Puerto Rico's solid waste regulations, in 1994. Also identify any relevant transfers of responsibility between agencies, or between offices within EQB, that have occurred with respect to landfill permitting and enforcement. For all regulatory changes, please have the Attorney General of the Commonwealth of Puerto Rico provide a precise description of the changes, rational for the changes, and certify as to the adoption of the changes. Include an English-language text of the revised regulations with a certification that it has been properly translated. Note that:
- a. EPA's review of the November 10, 1997 Commonwealth's Solid Waste Management Regulations indicates that the definition of Lateral Landfill Expansion was revised as follows: "Horizontal growth of a existing landfill filling system beyond the limits previously contemplated in the environmental document and beyond the limits of the boundary." This definition appears to allow expansion beyond the waste handling area of the sanitary landfill without meeting the requirements for liners and leachate collection systems. This is contrary to federal regulations, and the October 4, 1993 Commonwealth regulations, which were reviewed and accepted by EPA. These regulations required liners and leachate collection systems if lateral expansion occurred (defined as "A horizontal expansion of the boundaries of the waste-handling area of the SL (sanitary landfill) facility"); and
- b. With respect to Financial Responsibility, EPA's review of the Commonwealth's November 10, 1997 regulations indicates that Financial Responsibility is not required for municipalities. This is contrary to the federal regulations and the October 4, 1993 Commonwealth regulations, which only exempted the Central Government of the Commonwealth of Puerto Rico. The November 10, 1997 regulations deleted "...Central Government of the Commonwealth of Puerto Rico" and substituted "The entities of the Government of Puerto Rico..."

These two regulatory changes are contrary to what federal regulations require and it is important that steps be taken to reinstate the prior October 4, 1993 Commonwealth solid waste regulations with respect to the definition of lateral landfill expansion and financial responsibility. At a minimum, by March 1, 2006, the reinstated regulations should be publicly noticed. EPA will attempt to advise of additional comments or concerns regarding other identified changes to the Commonwealth regulations by January 10, 2006. As of this date, the Commonwealth has not submitted the the documents requested.

Closure of Reopened Dumps

4. Through the issuance of Final Enforcement Orders by March 1, 2006, take action against public and private operators and owners to close any open dumps that were previously closed or ordered closed, but were officially allowed to reopen, such as Santa Isabel, or are illegally still operating (e.g., Aguadilla).

Operation Compliance Implementation

5. By March 1, 2006, EQB must Public Notice at least the AZasco, Barranquitas, Jayuya, Juana Díaz, Juncos, and Lajas Consent Orders (which include the negotiated Compliance Plans). All Publicly

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- a. Needed interim measures, including ensuring security, controlling waste acceptance, applying daily cover, groundwater and methane (explosive gas) monitoring, and stormwater run-on/off controls;
- b. Requirements for all public and private owners/operators to meet financial assurance requirements pursuant to Puerto Rico Solid Waste Regulations which were adopted October 4, 1993 and accepted by EPA (see the discussion above in Paragraph 3); and
- c. Any additional provisions of the Orders, beyond interim measures, should be consistent with the long-term plans for the facilities. Orders may have to be amended in the future to include requirements of the long-term plans.

Closure of Florida Open Dump

6. By March 1, 2006, EQB must public notice the Consent Order for the Florida open dump. This Consent Order must require the closure of the entire open dump. It is especially important that this open dump be closed because it is located in a very vulnerable geological area which serves as a drinking water source. Moreover, we understand that there has been informal consideration by EQB about the possibility of closing this open dump. The Consent Order must require compliance with the interim measures specified in 5.a above until closure is completed.

Interest from Elected Officials

Resident Commissioner Fortunato and RA have discussed the seriousness of this problem.

Options & Recommendations

See above Recommendations of the RCB and RPB Workgroup and Actions Needed by the Commonwealth.

Background